

The Innovative Air Mobility Hub eSORA User Guide

Issue 1

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Table of Contents

1	Introduction.....	4
1.1	Background and objectives of the IAM Hub	4
1.2	What is eSORA tool	4
1.3	The IAM Hub modules.....	6
1.4	Registration on the IAM HUB.....	7
1.5	Abbreviations	7
2	General information	9
2.1	IAM Hub partner zone main page.....	9
2.1.1	The navigation panel	10
3	Starting eSORA case	11
3.1	eSORA case creation module	11
3.2	eSORA module interface overview	12
3.3	UAS data and flight description	13
3.3.1	Selecting the UAS.....	13
3.3.2	Operation details (flight description)	14
4	SORA documentation Step #1	15
4.1	Details tab	15
4.2	Flight path tab	17
4.2.1	Map overview	17
4.2.2	(Optional) Correct Errors in Population Density Values	19
4.3	Impacted areas.....	19
5	Step #2 Intrinsic Ground Risk Class	20
5.1	Ground Risk Summary.....	20
6	Step #3 Final Ground Risk Class determination.....	21
6.1	M1(A) Strategic Mitigation – Sheltering	21
6.2	M1(B) Strategic Mitigation – Operational restrictions	22
6.3	M1(C) Tactical Mitigation – Ground observation	23
6.4	M2 Effects on UA impact dynamics are reduced	23
7	Step # 4 Initial Air Risk Class	24
7.1	Flying close to obstacles.....	24
7.2	Temporary segregated airspace by NOTAM (Notice to Airman)	25
7.3	Atypical airspace	25
7.4	Type of airspace	26
8	Step #5 Air Risk strategic mitigation.....	27
9	Step #6 Tactical Mitigations Performance Requirements (TMPR)	29
10	Step #7 Specific Assurance and Integrity Level (SAIL) determination.....	30



11	Step #8 Containment requirement	31
12	Step #9 Operation Safety Objectives (OSOs).....	33
13	Report stage	34



1 Introduction

1.1 Background and objectives of the IAM Hub

The **Sustainable Innovative Air Mobility (IAM) Hub** is a unique digital platform that was initiated by the European Parliament and the European Commission as part of the Drone Strategy 2.0 Flagship 7 to address societal concerns and support the implementation of new forms of aviation in a safe and sustainable manner. The IAM Hub aims to facilitate the safe, secure, efficient, and sustainable implementation of innovative air mobility practices, such as drones and electric vertical take-off and landing (eVTOL) vehicles, in Europe. The IAM Hub connects various stakeholders in the European system, including cities, regions, national authorities, the EU, operators, and manufacturers, and provides them with comprehensive and up-to-date information, guidelines, and data on IAM-related topics. The IAM Hub also supports the harmonization and implementation of EU rules and regulations, the promotion of transparent and robust information on noise and sustainability, and the communication of the benefits and impacts of IAM to the public.

The **overall objective** of the **IAM Hub** is to enable a safe, secure, efficient and sustainable UAM implementation in Europe as foreseen in the Drones Strategy 2.0 by providing an interactive online platform ("IAM Hub") for IAM ecosystems.

In collaboration with the IAM Hub Task Force, **four specific objectives were defined**: (1) to connect IAM communities, (2) to communicate on IAM benefits and impacts, (3) to centralise IAM Data and (4) to support IAM implementation and digitalization in EASA Member States. The Task Force also helped to define the IT architecture, user needs and task prioritisation to develop the IAM Hub in the initial two phases.

The IAM Hub offers **nine modules**, divided between **Public** and **Member Zones**:

Public Zone:

1. **Knowledge & Guidance**: Centralized information on drone/eVTOL design, rules, and societal benefits
2. **The Drone Rule Navigator**: Interactive tool for regulatory compliance
3. **The Drone Economy Dashboard**: Statistics and contact points for UAS operations across EASA Member States
4. **Harmonised Population Density Data based on EASA guidelines**: Ground risk assessment tool using JRC/Copernicus data


Member Zone:

5. **Drone Database & Design Declarations**: Central data base for drone designs and compliance documentation
6. **Operational Declarations**
7. **eSORA**: Automated risk assessments and authorization tools
8. **Cross-Border Operations**: Guidelines and tool for CBO
9. **Geographical Zones (GZ)**: Harmonized geographical zones for UAS operations

This user guide is covering the eSORA module of the IAM Hub.

1.2 What is eSORA

The eSORA tool (electronic Specific Operations Risk assessment) a module of a broader platform [IAM \(innovative air mobility\) hub](#), that supports different UAS and advanced air mobility topics.

 The IAM Hub is a Flagship Action of the Drone Strategy 2.0 and has received funding from a Contribution Agreement with the European Commission.

The eSORA tool has been developed to automate and standardise the SORA 2.5¹ process. It enables UAS operators to collect and present the evidence required by the National Aviation Authority (NAA) in order to obtain an operational authorisation for UAS operations in the *specific* category, in accordance with Commission Implementing Regulation (EU) 2019/947.

On the basis of the evidence submitted, the NAA assesses the acceptability of the proposed mitigation measures and confirms the final Specific Assurance and Integrity Level (SAIL). This stage corresponds to Phase 1 of the SORA 2.5 framework.

These guidelines are intended to assist UAS operators in the effective use of the eSORA tool. They provide step-by-step instructions on how to use the application and for creating representative case scenarios while facilitating the automated generation of the required SORA 2.5 documentation and risk-assessment outputs.

In this document the term UAS (unmanned aircraft system) or UA (unmanned aircraft) when we refer to the flying part only, will be used instead of the more colloquial 'drone'.

At present, many applications for operational authorisation contain errors or omissions, largely due to misunderstandings of the UAS regulations and of the SORA process. As a result, NAAs must dedicate significant time to reviewing applications and advising UAS operators on how to submit properly completed documentation with all required evidence. This slows down the authorisation process and increases the workload for NAAs and UAS operators.


The eSORA tool addresses these challenges by standardising applications and input data, thereby reducing the time needed to issue an operational authorisation. eSORA automatically performs key calculations and assessments, enabling the preparation of higher-quality applications and supporting a greater number of operations.

If eSORA tool technical problems are encountered, you can use the internal chat function to interact with the IT support.

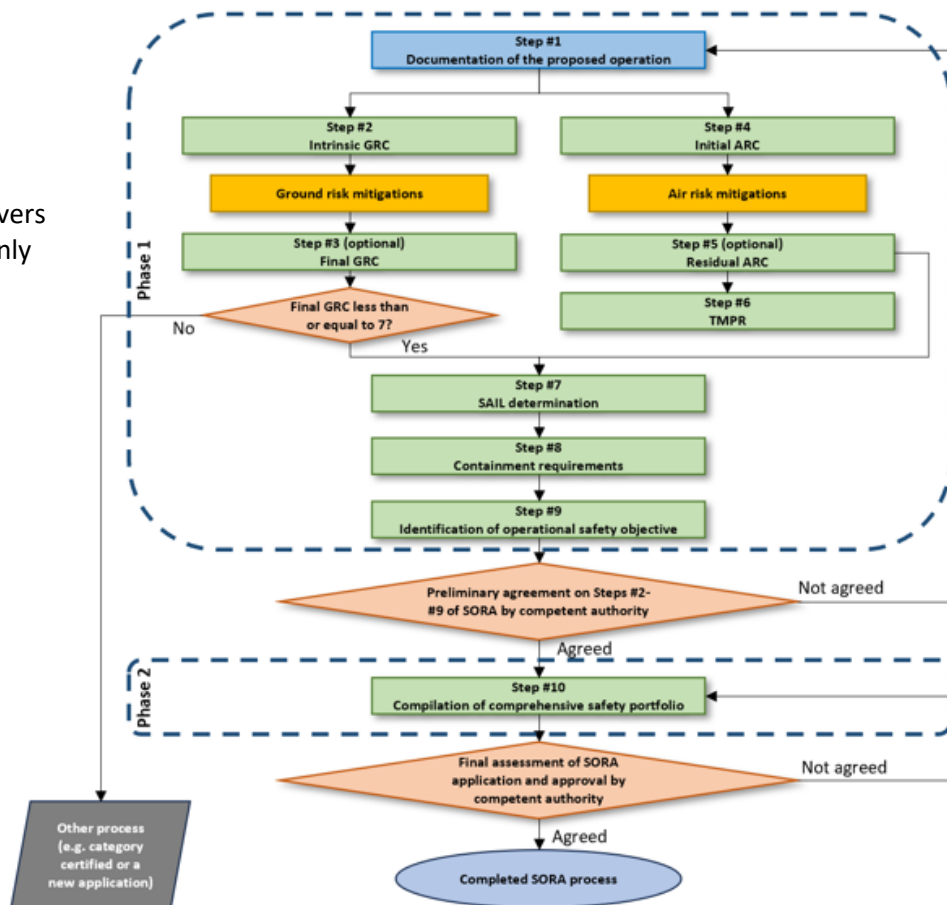
For more information on SORA process and regulatory framework see [Easy Access Rules for Unmanned Aircraft Systems](#).

To contact local National Aviation Authority for further information, see the [list of NAA website by country](#).

¹ AMC 1 Article 11 to Regulation 2019/947. https://www.easa.europa.eu/en/document-library/easy-access-rules/online-publications/easy-access-rules-unmanned-aircraft-systems?page=4#_DxCrossRefBm153270048

 The IAM Hub is a Flagship Action of the Drone Strategy 2.0 and has received funding from a Contribution Agreement with the European Commission.

eSORA covers
phase 1 only



The phases of the SORA process

1.3 The IAM Hub modules

The IAM hub implements multiple modules such as:

- critical area calculation of a UA;
- operational declaration for a standards scenario;
- product registration of a UAS;
- eSORA;
- cross border operation;
- rule navigator (available also in the public site).

These guidelines refer exclusively to the eSORA module. However, this module is integrated with the product registration functionality, which is available only to registered UAS designers (see point 1.3).

When a designer decides to make a UAS available to European UAS operators, the UAS may be registered and all relevant information—such as performance data and technical characteristics—will be stored in a central database, together with all evidences and declarations.

Registered UAS designers are permitted to register the following:



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- UAS with a class label (C1 to C6);
- UAS for which a statement of compliance with the [means of compliance \(MoC\)](#) published by EASA has been issued by the designer (for UAS operated up to SAIL III);
- UAS with a DVR (design verification report), to be operated in SAIL IV;
- UAS with a type certificate or restricted type certificate², to be operated in SAIL V and VI;
- Kits providing additional functions to a UAS, for which a statement of compliance with the [means of compliance \(MoC\)](#) published by EASA has been issued by the designer or a DVR is issued by EASA.

In this way, when creating an eSORA case, the UAS operator can simply select the registered UAS (and, where applicable, the relevant kit). The system will then automatically retrieve all technical data provided by the designer in order to calculate the parameters required for the risk assessment (e.g. the operational volume, the ground risk buffer size etc.). Only the UAS performance that may be modified by the UAS operator will be displayed in eSORA (e.g. the maximum speed or height at which the UAS is designed to be operated, such that the UAS operator may limit the operation to a lower value resulting in smaller operational volume and ground risk buffer). No other technical data provided by the designer will be visible to UAS operators. Also the evidences developed by the UAS designer may be retrieved directly by the NAA in the IAM hub, without the need to be shared with the UAS operator.

1.4 Registration on the IAM HUB

The IAM Hub consists of two areas: a public area and a restricted-access area. The eSORA tool is located in the restricted-access area and requires user registration.

Users may register themselves in one of the following categories:

- NAA;
- UAS operators;
- UAS designer;
- municipality.

Access to specific modules within the IAM Hub depends on the user's registration category.

The eSORA module will be accessible by NAAs and UAS operators.

1.5 Abbreviations

ARC – Air risk class

BVLOS – Beyond visual line of sight

DVR – Design verification report

eSORA – Electronic specific operations risk assessment

fGRB – Final ground risk class

GRC – Ground risk class

² Issued according to Annex I (Part 21) of Regulation (EU) 748/2012.



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IAM – Innovative ais mobility

iARC – Initial air risk class

iGRC – Initial ground risk class

MoC – Means of compliance

NAAAs – National aviation authorities

rARC – residual air risk class

SAIL – Specific assurance integrity level

SORA – Specific operations risk assessment

UAS – Unmanned aircraft system

UA – Unmanned aircraft

VLOS – Visual line of sight














2 General information

On the upper side of the eSORA screen you will see on top a bar with a visual representation of 4 stages processes as depicted below



During the eSORA process you will know from this bar in which stage you are. The SORA phases associated to each stage are listed below

Start	Operation	Mitigation	Report
 1. Log in to the IAM HUB partner zone  2. Start eSORA case	 1. Enter UAS details  2. Enter flight operations information  3. Determine flight geography on map	 1. Mitigate ground risk  2. Determine and mitigate air risk  3. Determine applicable SAIL  4. Determine UAS containment requirements  5. Review applicable OSOs	 Download generated report

For example the picture below show the case when The “Start” stage is complete (for example after the case was open) and you are in “Operation” stage.

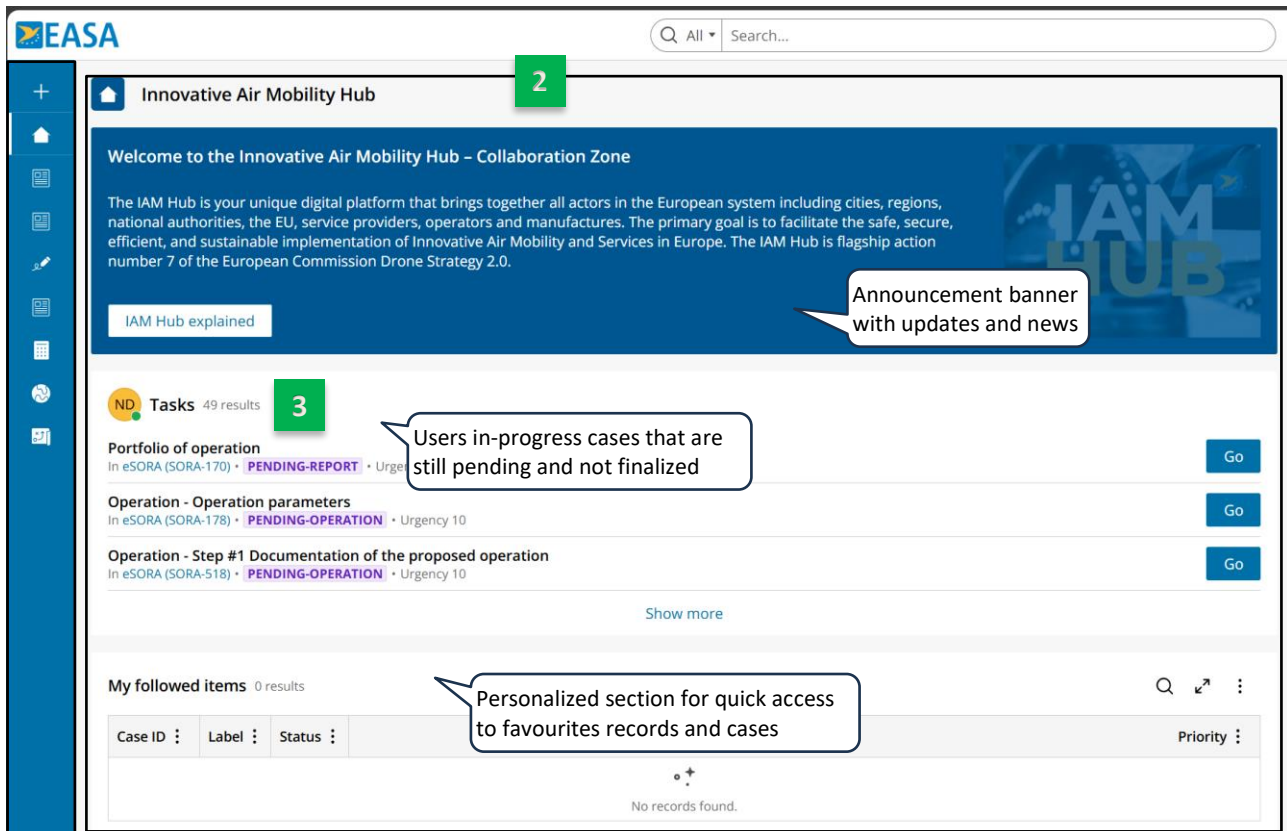


When a field has an ‘*’ this means that the information is mandatory

2.1 IAM Hub partner zone main page

After [log in](#), the system will display the main partner zone “IAM Hub platform page”. It is made of two areas: the **1** Navigation Panel, allowing to access to the different modules provided by the platform and the **2** Main area containing the announcement bar and a list of the latest task performed by the user.

For example, here you will the list of the most recently completed or pending tasks (e.g. eSORA cases completed or not finalised yet).



1 Navigation Panel

2 Innovative Air Mobility Hub

Welcome to the Innovative Air Mobility Hub – Collaboration Zone

The IAM Hub is your unique digital platform that brings together all actors in the European system including cities, regions, national authorities, the EU, service providers, operators and manufactures. The primary goal is to facilitate the safe, secure, efficient, and sustainable implementation of Innovative Air Mobility and Services in Europe. The IAM Hub is flagship action number 7 of the European Commission Drone Strategy 2.0.

[IAM Hub explained](#)

3 Tasks 49 results

Portfolio of operation
In eSORA (SORA-170) • **PENDING-REPORT** • Urgency 10 [Go](#)

Operation - Operation parameters
In eSORA (SORA-178) • **PENDING-OPERATION** • Urgency 10 [Go](#)

Operation - Step #1 Documentation of the proposed operation
In eSORA (SORA-518) • **PENDING-OPERATION** • Urgency 10 [Go](#)

[Show more](#)

My followed items 0 results

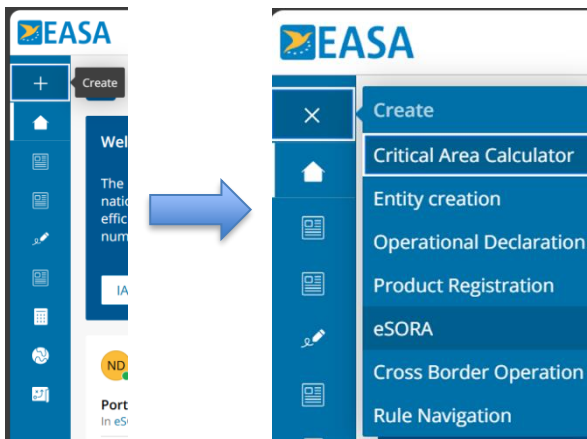
Case ID	Label	Status	Priority
No records found.			

Announcement banner with updates and news

Users in-progress cases that are still pending and not finalized

Personalized section for quick access to favourites records and cases

2.1.1 The navigation panel



+ Create → eSORA

This will open a new eSORA case creation module.

As alternative you may open an unfinished SORA case that you will find in **3** Tasks

On the **1** Navigation Panel

By clicking “+” symbol or “**Create**” button, the drop down or pop out menu will appear with several options to choose from.

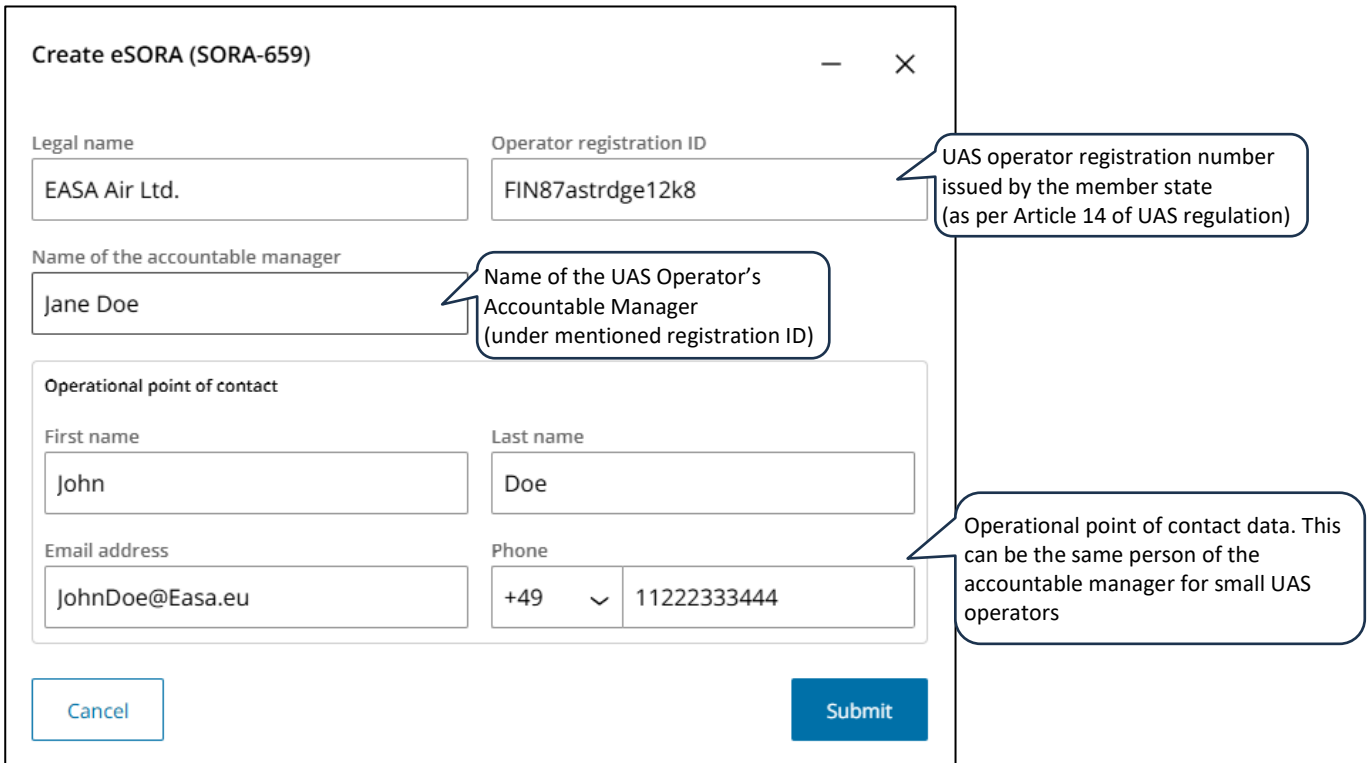
To start the eSORA case, click “**eSORA**” from the list.

3 Starting eSORA case

3.1 eSORA case creation module

The first window appearing contains the details regarding the UAS operator (user) as registered in the database.

Verify or input the required UAS operator information.



Create eSORA (SORA-659)

Legal name: EASA Air Ltd.

Operator registration ID: FIN87astrdge12k8
UAS operator registration number issued by the member state (as per Article 14 of UAS regulation)

Name of the accountable manager: Jane Doe
Name of the UAS Operator's Accountable Manager (under mentioned registration ID)

Operational point of contact

First name: John


Last name: Doe

Email address: JohnDoe@Easa.eu

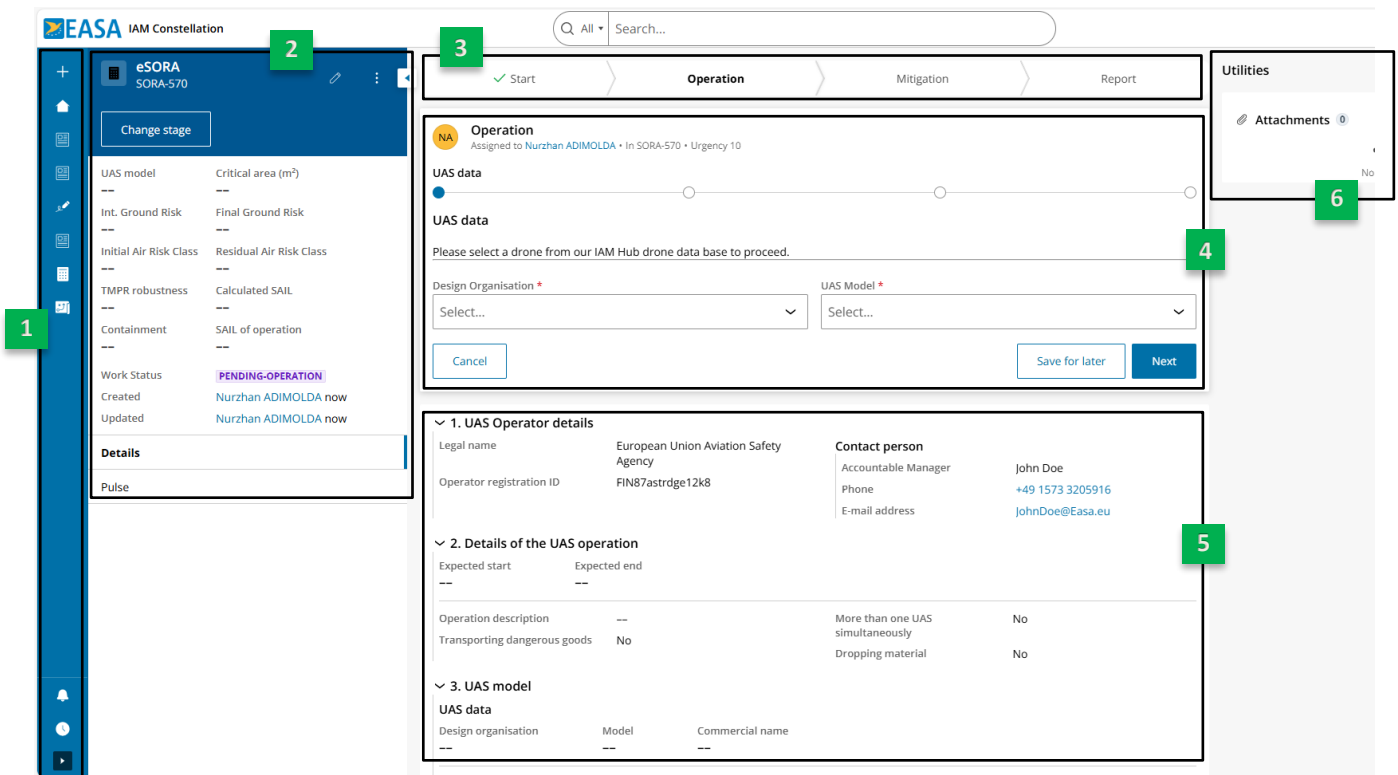
Phone: +49 11222333444
Operational point of contact data. This can be the same person of the accountable manager for small UAS operators

Buttons: Cancel, Submit

After confirming the details, click **Submit** to create the eSORA case.

 **Note:** these fields will normally pre-fill with profile information (as provided during registration).

3.2 eSORA module interface overview



The screenshot shows the eSORA module interface. On the left is a navigation panel (1) with a 'Change stage' button. The main area displays a progress bar (3) with stages: Start (checked), Operation (active), Mitigation, and Report. Below the progress bar is the 'Operation' stage input area (4) with fields for 'Design Organisation' and 'UAS Model'. To the right is a 'Utilities' section (6) with an 'Attachments' button. The main content area (5) shows details for the 'Operation' stage, including 'UAS Operator details', 'Details of the UAS operation', and 'UAS model'.

The eSORA interface will load with the new case, displaying:

- Same **1 Navigation panel** on the left.
 - **2 Case summary window** for quick reference that will update every time a step is completed, with the added information.
 - **3 Stages progress bar** indicating the stages *Start, Operation, Mitigation, Report*.
- The “Start” stage it is shown as complete since the case was open. “Operation” stage is now the active one.
- **4 Input area** is a main area for inputs which will be changing windows after each step.
 - **5 Application overview**. This section is organised as the operational application form. It will update with information along each step is finished and will be presented in the end of SORA case for confirmation.
 - **6 Attachments** area, which will display attachments uploaded during information input and draft application in the end.

3.3 UAS data and flight description

3.3.1 Selecting the UAS

On the dropdown menu in the **4 Input area**, select or search the UAS that will be used in the UAS operation.

As explained in the introduction, the eSORA is integrated to [EU-approved UAS database](#) and will show the available UAS. This will allow system to further consider UAS characteristics in calculations.

Design Organisation *


- ✓ EASA AIR Ltd.
- EUROPEAN COMMISSION
- EUROPEAN DEFENCE AGENCY

UAS Model *

- 001
- ES01

Once the UAS designer and model are selected, the tool will automatically populate the relevant technical characteristics (max. take-off weight, type, propulsion system, max. speed, category) in to the case.

See example below:


Operation
Assigned to Nurzhan ADIMOLDA • In SORA-576 • Urgency 10

UAS data

Design Organisation *

UAS Model *

Design organisation	Model	Commercial name
EUROPEAN COMMISSION	Demonstration	Demonstration

Type category	Multirotor	Maximum dimension (m)	3.5
Targeted operations category	Specific	Max. horizontal speed (m/s)	30
Propulsion system	Electric	Maximum take off weight (kg)	28
Containment level of robustness	High	Sound power level (dB-A)	--
Green flashing light	Yes	Max. Specific Assurance and Integrity	SAIL III
Conspicuity equipment	ADS-L 4 MOBILE, Network remote identification	Type of C2 link	Direct radio link
M2 techn. mitigation robustness	Low		
Mitigation function	With parachute		

Note: Each UAS is designed to operate up to maximum SAIL. You may not operate above this SAIL with this type of UAS

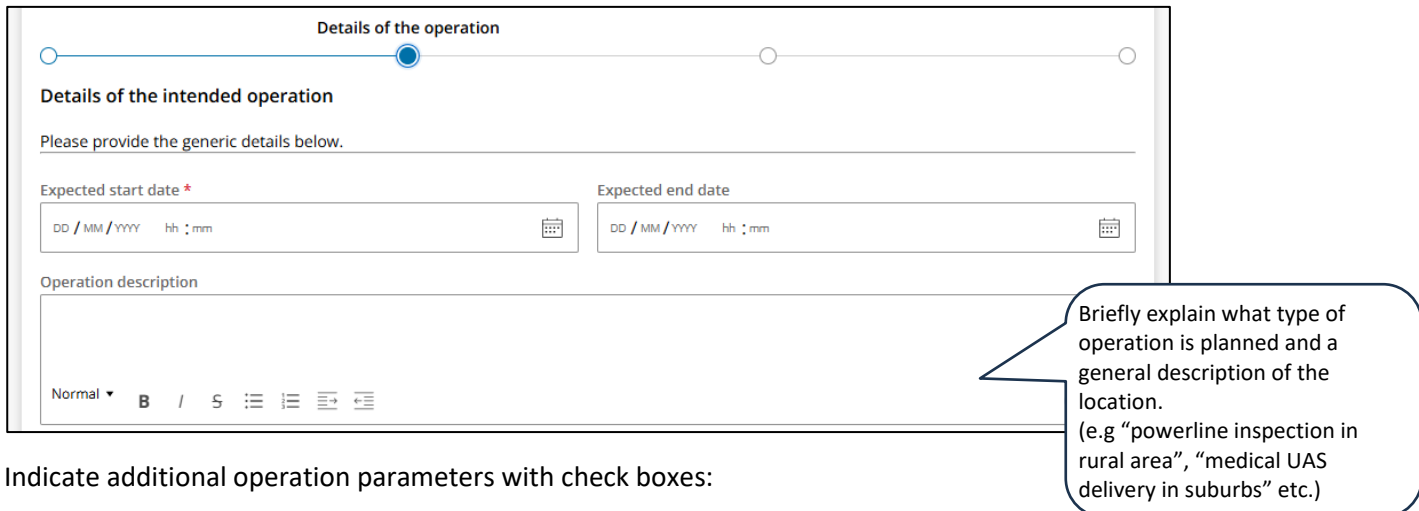
Area autofilled with UAS specification defined by the UAS designer

Note: if some UAS information is missing or incorrect, notify the design organisation to update the UAS records through Product Registration Tool.

After verifying information, click **Next** to continue.

3.3.2 Operation details (flight description)

The next window requires to provide the basic details of your intended operation. This should contain the date when the UAS operation is intended to be conducted, general description of the UAS operation and special operational aspects.



Indicate additional operation parameters with check boxes:



Transporting Dangerous Goods. Check this if the UAS will carry any dangerous goods (e.g., hazardous articles or substances, explosives, gases, flammables, radioactive, toxic or corrosive substances etc.).

- **If selected,** list the dangerous goods being transported and provide the procedures regarding the transport for dangerous goods explaining how you ensure that no additional risk is posed to third party. Attach supporting evidence or documentation (for example: approvals, handling procedures, instructions).

Dropping Materials. Check this if the operation includes dropping or releasing any materials/liquids from the UA (for example, food or parcel delivery, chemicals spraying).

- **If selected,** describe the materials being dropped and upload supporting documents (approvals, handling procedures, instructions) to explain how it can be operated in a safe manner.

Does the remote pilot control more than one UA simultaneously? Check if a single remote pilot will be operating multiple UAS simultaneously during operation.

- **If selected,** specify the number of UA controlled by one pilot. This option is available only if the designer indicated that the UAS has been designed with a level of automation reducing the remote pilot intervention.

Once all details are provided, click **Next** to proceed. This will finish the general information and move to SORA Step #1.



4 SORA documentation Step #1

After the general information have been added the 9 steps of the phase 1 of the SORA process may be started.

SORA step #1 consists of two sub sections (tabs) **Details** and **Flight Path**. In this section the UAS operator is required to provide all the information required to calculate the operational volume, ground risk buffer, adjacent area, the additional information defined in the application form and in order to determine the initial ground risk.

The UAS operator is required to first insert all the data included in the **Details** tab and then **Flight Path** tabs, before moving to the next tel.

Step #1 Documentation of the proposed operation

Provide the characteristics of the intended operation and the flight path or area on the map (see **Flight path** tab below).

For more information about SORA see [Easy Access Rules for Unmanned Aircraft Systems](#)

Details

Flight path

4.1 Details tab

On the **Details** tab of Step #1 provide data about flight characteristics. The value will be already prefilled with the maximum values defined by the designer during the registration of the product. The UAS operator is only allowed to reduce them. The UAS operator is required to reflect in the operations manual all the values listed here.

<p>Minimum operational flight height AGL (m) *</p> <div> <div>–</div> <div>20</div> <div>+</div> </div> <p>Minimum operational flight height AGL (m) – i.e the minimum height the UA might fly during normal operating conditions, except during take off and landing phases.</p>	<p>Height of flight geography (m) *</p> <div> <div>–</div> <div>100</div> <div>+</div> </div> <p>Height of flight geography (m) – the maximum height of the operation.</p>
<p>Max. operational speed (m/s) *</p> <div> <div>25</div> </div>	<p>Wind speed (m/s) *</p> <div> <div>–</div> <div>10</div> <div>+</div> </div>

Max. operational speed (m/s) – maximum speed UA will reach during operation.

Max. operational speed (m/s) *

28

▲ Operational speed should be lower or equal to the 25 m/s defined on drone

Tip: In case of seeing this error, adjust the Max. operational speed within the range set by designer. The error message will hint the exact max. speed set by the designer for used UAS.

Wind speed (m/s) – under which it is planned to conduct the operation safely.

If exceeded, system will show an error “Wind speed should not exceed the limit defined by UA designer”. Input a lower value within the limit set by manufacturer.

Manual procedures reaction time (s) *

1

Manual procedures reaction time (s) – estimated reaction time for the remote pilot to initiate an emergency or contingency procedure.

Ground Risk Buffer Computation *

Ground risk buffer size defined using the 1:1 rule

Select...

Ground risk buffer size defined using the 1:1 rule

Emergency procedures include flight termination using parachute

Ballistic approach

Fixed-wing aircraft with power switched off

Ground Risk Buffer Computation – select the appropriate methodology for the operation on the ground risk buffer determination.

Note: EASA is aware that to date several UAS operators, when carry out SORA application rely on the simplest way of calculating the ground risk buffer (i.e. applying 1:1 rule, meaning the buffer zone equals the altitude). Automated eSORA tool offers more alternatives by making complex calculations for the user, based on the inputs. Depending on the type and characteristics of the selected UAS not all methodology may be available. The UAS operator is required to define which one is most appropriate for its operation.

Tip: an error “*Intrinsic Ground Risk hasn’t been calculated – make sure all required parameters and flight path are in place*” or “*missing Flight Path*” might appear. It indicates that user haven’t completed **Flight path** tab.



Intrinsic Ground Risk hasn't been calculated - make sure all required parameters and flight path are in place

Once all fields are filled in, click the **Flight path** tab of the same Step #1.

Step #1 Documentation of the proposed operation

Provide the characteristics of the intended operation and the flight path or area on the map (see **Flight path** tab below).

For more information about SORA see [Easy Access Rules for Unmanned Aircraft Systems](#)

Details

Flight path



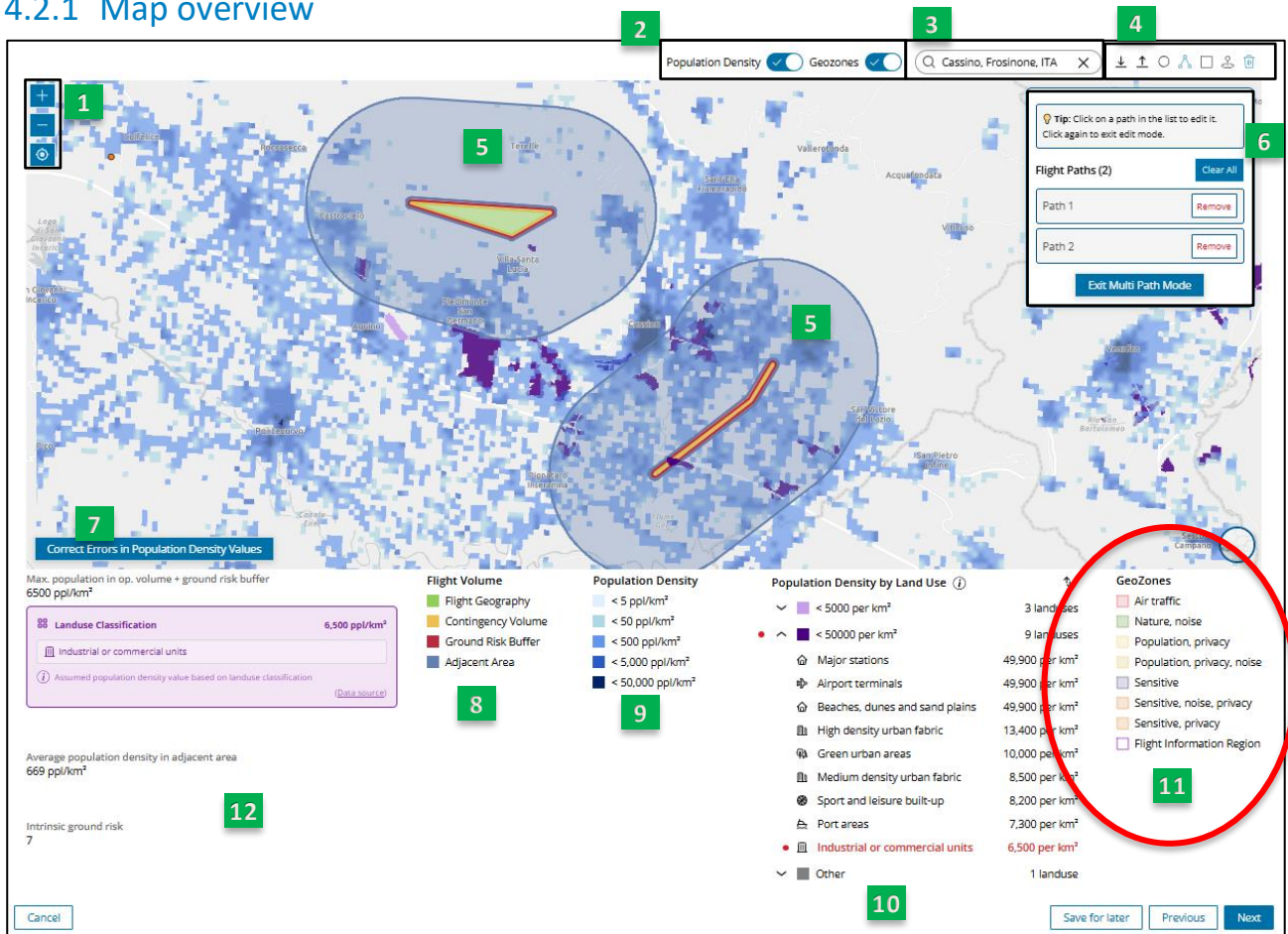
4.2 Flight path tab

In the Flight path tab, please define the geographical area of the operation using an interactive map.




By drawing the area where you intend to operate, the tool will assess the population density of the overflown area in order to calculate the exact ground risk class (GRC).



The system will display population density and geographical zones maps. It may happen that not for all EASA states this information may already be available.

4.2.1 Map overview




The interactive drawing map displays:


- **1 Zoom/current location** to zoom in or zoom out or centre in the location where you are (in order to enable this last function you need to set your system to share your location).
- **2 Layers filter** with Population density overlay and GeoZones overlay. Here you may decide to display only one of the two to simplify the reading of the map.
- **3 Search** function to search for a location.
- **4 Map drawing tools** with circle (radius) , a lines  and polygon . Use this tool to draw the flight path or the area of operation where you intend to operate using the feature that better suits your needs.

Geozone information pin  and clearing  of drawn flight path.



Importing and exporting map file in GeoJSON and KML format   .

The flight path or the area of operation can be redrawn by clicking “clear”  symbol.

 **Tip:** to reduce the GRC try adjusting the flight geography to affect less population, which will likely lead to lower Ground Risk Class.

- **5 Operational area, ground risk buffer and adjacent area** when drawing a flight path or area of operation with the map drawing tool, the system will automatically display the flight geography, contingency area, ground risk buffer and adjacent area. The size of all the areas is automatically calculated based on the mathematical model defined in SORA 2.5 and the parameters indicated in the previous steps. The system allows to draw multiple operational areas.
- **6 Flight paths** list of all flight paths or area of operations drawn.
- **7 Correct Errors in Population Density values** If you have evidence that the maps has a mistake (for example an area recently developed to a different use not yet shown on the map, so the population density is actually changed) then you can use this feature. This change will be approved by the NAA and a log will be created. For more information see paragraph 4.2.2.
- **8 Flight volume legenda** colour code explanation of the flight volume using the definition of SORA semantic model.
- **9 Population density legenda** colour code explanation of the population density values derived by census data.
- **10 Population density by land use legenda** colour code explanation of the population density values derived by land use. Census data are based on the information where people are registered. Therefore, the data may be considered accurate for the population in the residential area during night. Non-residential areas are always considered empty. In order to solve this issue, the census data has been complemented with the identification of areas where people may be especially during day (e.g. industrial, commercial, recreational areas etc.)³. A red dot on the side of one of the indicated area means that the operational volume or ground risk buffer impact one of these areas.
- **11 Geozone Legenda** colour code explanation of the available geographical zones.
- **12 Population density value and initial ground risk class** here you find the calculated value of the maximum population density of the area covered by the operational volume and ground risk buffer; the average population density of the adjacent area and the resulting initial ground risk class (additional details on this will be provided in the next step).

³ For additional information please refer to the documentation that may be found here
<https://www.easa.europa.eu/en/domains/drones-air-mobility/operating-drone/statistical-population-density-easa-member-states>



4.2.2 (Optional) Correct Errors in Population Density Values

Since eSORA tool pulls the population density from the static source, it may not reflect the most current population density data.

If user has evidence that the usage of an area has been changed and a different population density should be assigned, eSORA tool allows to Correct Errors in Population Density Values.

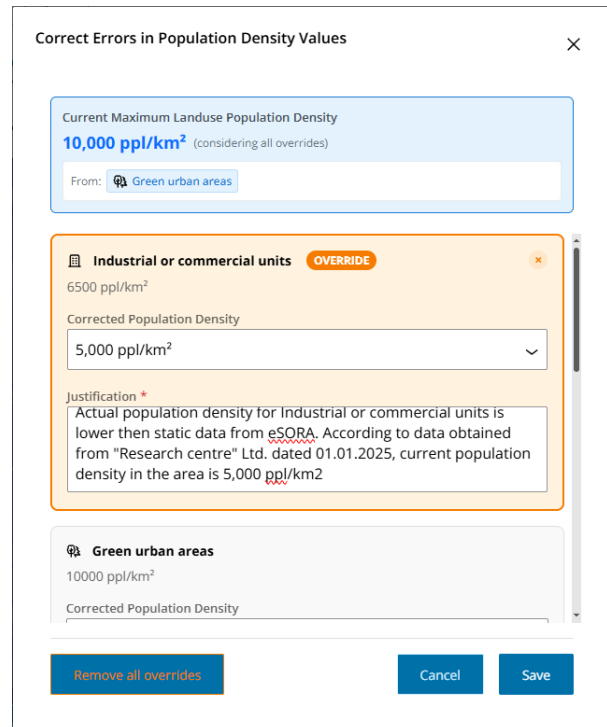
To correct/override the data, click the

7 Correct Errors in Population Density tool in the bottom left corner of the map.

Correct to the relevant data for each impacted area (e.g Industrial or commercial units; Port areas; Constructions sites; Green urban areas; etc.) and provide a justification/source reference.

Check if the information is provided and click **Save**.

Once flight geography is drawn and all required data, both on the Details and Flight Path tabs are provided, proceed by clicking **Next**.



Correct Errors in Population Density Values

Current Maximum Landuse Population Density
10,000 ppl/km² (considering all overrides)

From: **Green urban areas**

Industrial or commercial units **OVERRIDE**

6500 ppl/km²

Corrected Population Density
5,000 ppl/km²

Justification *

Actual population density for Industrial or commercial units is lower then static data from eSORA. According to data obtained from "Research centre" Ltd. dated 01.01.2025, current population density in the area is 5,000 ppl/km²

Green urban areas

10000 ppl/km²

Corrected Population Density

Remove all overrides **Cancel** **Save**

4.3 Impacted areas

On the next step system will summarise the land use areas impacted by the operational volume, ground risk buffer and adjacent area with the population density values.

Impacted Land Use 5 results				
Description	Assumed (ppl/km ²)	Overridden (ppl/km ²)	Override reason	People outdoor
Urban vegetation	4,000	-- --		No
Industrial or commercial units	6,500	-- --		Yes
Green urban areas	10,000	-- --		Yes
Sport and leisure green	4,500	-- --		Yes
Sport and leisure built-up	8,200	-- --		Yes

Impacted Land Use in adjacent area 8 results				
Description	Assumed (ppl/km ²)	Overridden (ppl/km ²)	Override reason	People outdoor
Urban vegetation	4,000	-- --		No
Industrial or commercial units	6,500	-- --		Yes
Port areas	7,300	-- --		No
Construction sites	3,500	-- --		No
Green urban areas	10,000	-- --		Yes
Sport and leisure green	4,500	-- --		Yes
Sport and leisure built-up	8,200	-- --		Yes
Beaches, dunes and sand plains	49,900	-- --		Yes

Once reviewed, click **Next** to proceed to SORA Step #2.



5 Step #2 Intrinsic Ground Risk Class


5.1 Ground Risk Summary

The system will now determine the **iGRC calculation** automatically and provide the summary for the operation. Please be aware the system will already use the calculated critical area for the UAS used based on the formula provided in SORA 2.5 Annex F.

This part does not require any input, it serves as informational review.

Ground Risk Summary					
Maximum dimension (m)	2.7	Critical area calculation (m ²)	19,67	Max. horizontal speed (m/s)	23
Controlled ground area	No	Max. population volume (ppl/km ²)	28,250	Average population density in adjacent area (ppl/km ²)	6,327
Intrinsic Ground Risk 7 iGRC					

For the reference, this will be presented with the ground risk matrix.

 **Tip:** if the calculated iGRC is unexpectedly high try adjusting the flight geography to affect less population or consider switching UAS to less “riskier” one (i.e smaller, slower). Further user can still lower the risk on step #3 by proposing mitigation measures.

Once reviewed click **Submit** to proceed. Will finish the stage “Operation” info and start SORA Step #3.



After submitting, the progress bar should show that “Start” and “Operation” stages are complete. System will move on to “Mitigation” stage, starting with SORA step #3

6 Step #3 Final Ground Risk Class determination

Final Ground Risk Class (fGRC) determination focuses on mitigating the initial ground risk (iGRC) identified in Step #2 before.

Applying certain mitigations will lead to a reduction of the ground risk class.

6.1 M1(A) Strategic Mitigation – Sheltering

The sheltering mitigation is for the cases where population of overflown area are sheltered by staying inside of building or any structure so they are protected in case of UA crash.

- **If selected**, provide a sufficient explanation of how the sheltering will be achieved. For example if operation conducted on Monday night, when most people stay inside “sheltered”.

M1(A) Strategic mitigation - Sheltering

Is the operational volume over a sheltered environment? *

☒ Yes ☐ No

Do you have operational time-based restrictions in place to lower the population at risk of one further order of magnitude? *

☒ Yes ☐ No

Please reference here the document in which the time-based restriction is demonstrated *

EASA Air Ltd. Operations Manual, Part B, Chapter 6 Mitigation strategies, Section 6.3 Strategic mitigation measures, M1(A) Sheltering.

"To lower the ground risk, operator MUST conduct the flights over populated areas ONLY in early morning period window from 05:00 to 07:00 am, and may operate ONLY UAS with max. take off mass below 25kg."

And NOTAM request to local ATM showcasing requested period from 05:00 to 06:00.

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M1(A) Robustness

Medium

Reduction points

2

An explanation how sheltering will be achieved and reference to the evidence document

Robustness level and risk reduction points calculates automatically

- **If UAS MTOM over 25 kg**, the system will point it out and will ask to address an additional question.

M1(A) Strategic mitigation - Sheltering

Is the operational volume over a sheltered environment? *

☒ Yes ☐ No

The UA model selected is heavier than 25 kg

Maximum take off weight 26

Do you have supporting evidences that the level of integrity of this mitigation may be achieved? *

☒ Yes ☐ No

Please reference here the document in which sheltering effectiveness is demonstrated *

Simulation test results from "UAS testing facility" for UAS model ES01 dated 01.01.2025

Page 5, Impact energy

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In a case of no evidence provided, the system will not grant a risk reduction points

Document with evidence (e.g testing results, operational experience, UA specific features etc.)

6.2 M1(B) Strategic Mitigation – Operational restrictions

In this section you may indicate you apply some time operational restrictions or use a dynamic population density provider to justify a lower population density data.

M1(B) Strategic mitigation - Operational restrictions

Has the user subscribed a service with a dynamic population density data provider? *

☒ Yes ☐ No

Population density *

< 5,000 ppl/km²

Describe the mitigation applied and provide reference in which the level of robustness is substantiated. *

According to telecom provider, the real number of exposed people in the overflow area will be lower than determined by map.
As evidence, operator hold a contract with Vodafone on data provision.

Normal **B** / *S* :≡ ≡≡ ≡≡ ≡≡

M1(B) Robustness

Medium

Reduction points

1

Population density *

< 5 ppl/km²

Select...

< 5 ppl/km²

< 50 ppl/km²

< 500 ppl/km²

< 5,000 ppl/km²

< 50,000 ppl/km²

> 50,000 ppl/km²

Ranging population groups from Ground risk matrix

- **if you have a contract with a provider of dynamic population density accepted by the NAA where the operation takes place**, you can indicate the maximum population density value of the operational area and ground risk buffer at which the operation will take place and include an operational procedure in the operations manual requiring the remote pilot to check before flight that the population density is within the limits.

M1(B) Strategic mitigation - Operational restrictions

Has the user subscribed a service with a dynamic population density data provider? *

☐ Yes ☒ No

Do you have spacetime-based restrictions in place to substantiate that the actual density of people during the operation is lower then the one assessed in Step#2? *

☒ Yes ☐ No

Population density *

< 50 ppl/km²

Describe the mitigation applied and provide reference in which the level of robustness is substantiated. *

The operation will be conducted between 2 and 4 a.m.

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
M1(B) Robustness

Low

Reduction points

0

- ***you may decide to include a time restriction***, in this case you should justify that during that time the population density indicated is valid in all the operational area and ground risk buffer and include the limitation in the operations manual.

 **Note:** user may proceed with no mitigation applied.

6.3 M1(C) Tactical Mitigation – Ground observation

This mitigation is applicable for cases when remote pilot or observers are involved to monitor the ground area in order to reduce the number of people exposed or advise to terminate the flight or change the route if needed.

Check the box if applicable. No additional input required.

M1(C) Tactical mitigation - Ground observation	
<input type="checkbox"/> The remote crew members are observing the vast majority of the overflown areas during the operation and reducing the number of people at risk by adjusting the flight path while the operation is ongoing.	
M1(C) Robustness	Reduction points
not applicable	0

6.4 M2 Effects on UA impact dynamics are reduced

This option is available only if the UAS you are using, was registered by the designer with a mitigation for the ground risk (e.g. a parachute) or you selected an appropriate kit applicable to such UAS.

Check the box if you are using this function. In this case you will define appropriate operational procedures in the operations manual.

M2 Effects on AU impact dynamics are reduced	
<input type="checkbox"/> Embedded M2 mitigation will be used	
M2 Robustness	Reduction points
Low	0

Once the information is provided, the system will automatically determine the **final GRC calculation** and provide the summary for the operation.

For the reference, this will be presented with the ground risk mitigation chart. **No input required.**

Final Ground Risk
4 fGRC

Ground Risk Mitigation 4 results

Ground risk mitigation	Low robustness level	Medium robustness level	High robustness level
M1(A) Sheltering mitigation	-1	-2	N/A
M1(B) Strategic mitigations	N/A	-1	-2 OR MORE
M1(C) Ground observation	-1	N/A	N/A
M2 Dynamics reduced	N/A	-1	-2

Once reviewed, click **Next** to proceed to SORA Step #4.

7 Step # 4 Initial Air Risk Class

In this step you are required to provide information about the airspace where the operation is conducted in order to determine the initial ARC.

Information that needs to be provided:

7.1 Flying close to obstacles

Close to obstacles? (see image below) *

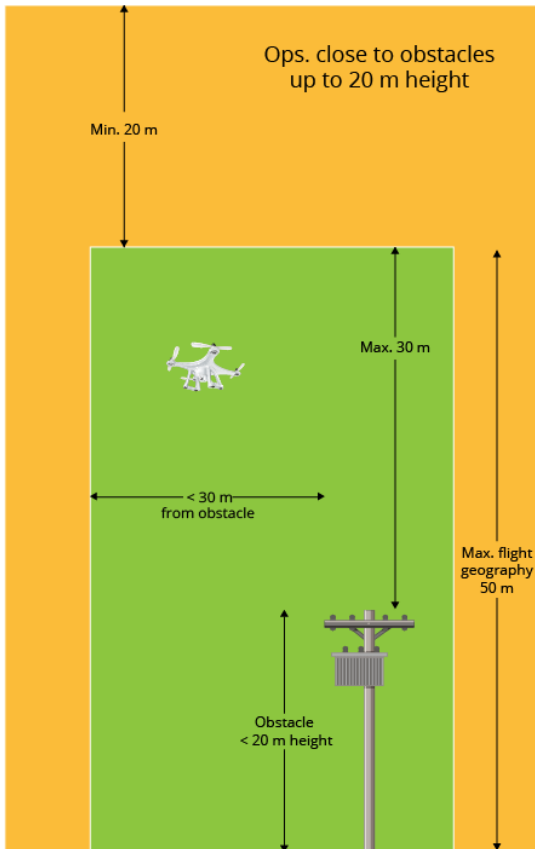
Select...

In case the UA will fly close to obstacles (trees, buildings, towers, cranes, fences, power lines, etc.) at a distance as in the figure below, please select this option.

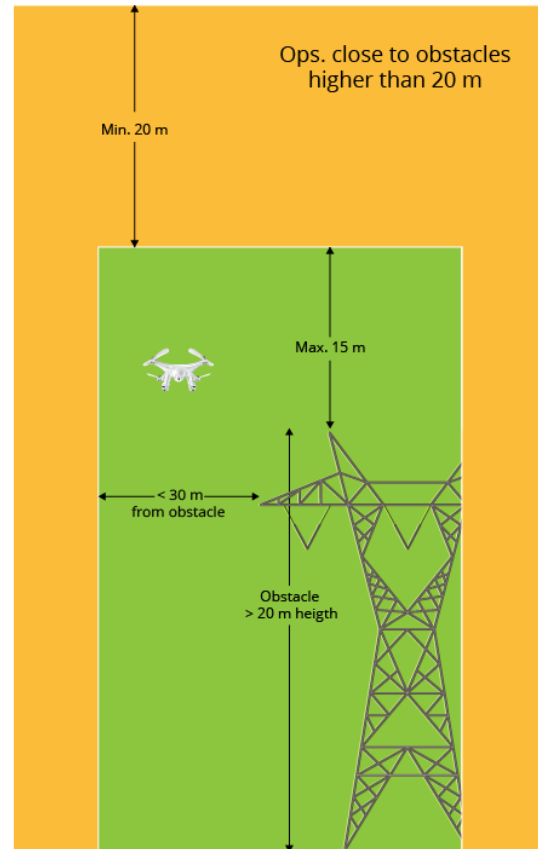
,Flying next to obstacle will reduce the risk of conflict with manned aircraft and lower the Air risk.



Scenario 1



Scenario 2



7.2 Temporary segregated airspace by NOTAM (Notice to Airman)

In a temporary segregate airspace defined by a NOTAM? * i

Select... v

Indicate if you intend to require the issuance of a NOTAM specifically for the intended operation.

The NOTAM has the scope to or restrict the area only to your operation avoiding that other aircraft may be present in the portion of airspace where your operation will be conducted.

7.3 Atypical airspace

Other atypical airspace? * i

Select... v

Atypical airspace is where manned aircraft are very unlikely to be encountered. Typically, this consists in the airspace close to an obstacle (see paragraph 7.1) or temporary segregated (see paragraph 7.2). The NAA where the operation takes place may identify other possibilities. In this case this option may be used and described.

7.4 Type of airspace

- **If all three options described in paragraph 7.1, 7.2 and 7.3 are clicked as NO**, the system will ask to provide additional information about airspace where the operation is intended.

Airport / heliport environment *	Class B, C or D Airspace *
<input type="text" value="Yes"/>	<input type="text" value="No"/>

- **If YES is selected in airport/heliport environment**, the system will ask to provide more information on the airspace class.

Otherwise the next question will be the following

Operation above 500 ft. but below FL600	
in Mode-C Veil or TMZ *	
<input type="text" value="No"/>	<div>FL600 – Flight level 600 ≈ 60,000 ft. Typically manned commercial operations are conducted below FL 600</div> <div>Mode-C Veil – transponder used in the busiest areas; TMZ- Transponder mandatory zone (for busy airspace); Meaning high encounter risk</div> <div>Tip: If unsure, check airspace map for TMZ or controlled areas around the airport/heliport.</div>
Controlled airspace *	
<input type="text" value="No"/>	
Uncontrolled airspace area	
<input type="text" value="Urban"/>	

After answering all questions, the system will automatically calculate the **initial air risk class**.

From ARC-a being the lowest to ARC-d as highest.

To proceed to the next SORA Step #5 click **Next**.

8 Step #5 Air Risk strategic mitigation

To reduce the probability of encountering a manned aircraft, you can apply the strategic mitigation. At this step, the system will require some information to determine the Residual Air Risk Class.

First specify the type of operation.

Remote pilot line of sight * ⓘ

☐ Visual (VLOS) ☐ Beyond Visual (BVLOS) ☒ BVLOS with observer

Select 'VLOS' if the UA will be kept at all time at a distance such that the remote pilot will always see the UA and avoid any obstacle.

Select 'BVLOS with observer' if you employ observer(s) that are in direct communication with the remote pilot. The UA must be at all time in view of at list one observer that needs to inform the remote pilot in case the UA is posing risk to other aircraft or obstacles. The operations manual must contain appropriate procedures for communications and definition of responsibilities.

Select BVLOS if the UA will operate without anyone looking at it. The system will display additional option to self-choose for establishing the Residual ARC.

— **If “BVLOS” option selected**, the system will provide flexibility in determining the Residual ARC, based on effectiveness of the mitigation measures by operator.

Remote pilot line of sight * ⓘ

☐ Visual (VLOS) ☒ Beyond Visual (BVLOS) ☐ BVLOS with observer

→

Note: while BVLOS provides certain flexibility, it also requires an operator to provide risk proportionate evidence.

You may decide to apply strategic mitigations to reduce the ARC. For additional information please refer to SORA 2.3 Annex C.

If applicable, choose from options under strategic mitigation drop down menu.

Strategic air risk mitigation applied *

Yes

Strategic mitigation *

By operational restrictions

Select...

By operational restrictions

By common rules and structures

- **By operational restriction** – it means limit the operation in a portion of the airspace where the encounter rate may be lower (e.g. if the operation is conducted in a controlled zone of an airport (CTR) a lower encounter rate may be at low level in a portion far from the approach or take off path; another example may be during the time of the day where the air traffic is lower.
- **By common rules and structures** – for example the operation is conducted in an airspace where U-space is deployed.

The system will ask you to select the residual ARC and to provide a justification.



The IAM Hub is a Flagship Action of the Dro

Select your rARC *

☒ a ☐ b ☐ c ☐ d

ending from a Contribution Agreement with the

European Commission.

Reference to the document in which evidence of the mitigation can be found. *

EASA Air Ltd. Operations Manual, Part B, Chapter 6 Mitigation strategies, Section 6.7 Air Risk Strategic mitigation, 6.7.1 Strategic Mitigation by Operational Restrictions.

"Operations conducted in BVLOS with observers, operator MUST involve appropriately trained observers among the crew who communicates with remote pilot in accordance with provisions in Part B, Chapter 3 and 4.

Conducting BVLOS with observers flight, operator MUST ensure:


- *observers are equipped with reliable communication means and visibility tools;*
- *operations are performed ONLY in daytime and weather conditions in Part B, Chapter 4;*
- *remote operator and observers have checked the recent map restrictions on the day of operation."*

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Residual Air Risk Class

ARC-b

 **Note:** user may proceed with no mitigation applied.


At this step, the system performs a check with the maximum SAIL defined by the designer for the selected UAS. If the SAIL resulting so far from the risk assessment is higher, the following error message is displayed:



The selected drone is not designed to fly at the SAIL resulting form

The selected drone is not designed to fly at the SAIL resulting form

SAIL of design SAIL II

 **Tip:** If by the end of Step #5, the calculated SAIL for operation exceeds the UAS design limit SAIL, eSORA will block further progress until operational SAIL does not exceed the UAS design SAIL limit

The system will point out the limit of used UAS SAIL of design.

To resolve lower the risk of operation by:

1. Reducing ARC in "Step 5" by proposing stronger mitigations (if the higher SAIL is driven by the air risk);
2. Reducing GRC in "Step 3" by proposing stronger mitigations (if the higher SAIL is driven by the ground risk);
3. Reducing GRC in "Step 1" by changing the flight geography and affecting less population (if the higher SAIL is driven by the ground risk);
4. Selecting different UAS in "UAS Data" that is designed for operations with higher SAIL.

To proceed to the SORA Step #6 click **Next**.



9 Step #6 Tactical Mitigations Performance Requirements (TMPR)

Based on the inputs from Step #4 and Step #5 (ARC), the system automatically calculates the level of robustness for TMPR and list different requirements.

- **If** operation planned to be conducted **in VLOS or ARC-a**, the system will state that there are **No requirements**. No input needed.

Step #6 Tactical Mitigations Performance Requirements

For more information about SORA see [Easy Access Rules for Unmanned Aircraft Systems](#)

No requirements

Operations within pilot's visual line of sight and/or air risk class "a" do not have tactical mitigation performance requirements.

TMPP robustness

No requirement

- **If** operation planned to be conducted **in ARC-b/c/d**, the system will list requirements for **Low or Medium or High robustness**, for which operator needs to provide the reference to the evidence.

TMPRs assignment table (not a screenshot from eSORA tool):

Residual ARC	TMPRs
ARC-a	No requirements
ARC-b	Low
ARC-c	Medium
ARC-d	High

Step #6 Tactical Mitigations Performance Requirements

For more information about SORA see [Easy Access Rules for Unmanned Aircraft Systems](#)

The diagram consists of three overlapping rectangular boxes arranged in a descending staircase pattern from left to right. The leftmost box is labeled 'Low robustness requirements'. The middle box, which overlaps the right side of the first box, is labeled 'Medium robustness requirements'. The rightmost box, which overlaps the right side of the second box, is labeled 'High robustness requirements'.

Level of robustness indicates the evidence requirement.

For example, “High” robustness will require evidence verification from NAA, whereas for “Low” level of robustness it’s enough to declare compliance with requirements.

Please make sure that in your operations manual you have the appropriate procedures. Reference them in the free text field above.

To proceed to the SORA Step #7 click **Next**.

10 Step #7 Specific Assurance and Integrity Level (SAIL) determination

On this step, the system will merge the previously calculated rARC and fGRC and show determined SAIL (ranges from SAIL I to VI). For reference purpose, it will also show SAIL matrix.

The determined SAIL reflects overall risk level of the intended operation.

The SAIL number will indicate the requirements in the next steps. Logically meaning higher SAIL, higher requirements to comply to.

This part does not require any input from you.

Step #7 Specific Assurance and Integrity Level (SAIL) determination

For more information about SORA see [Easy Access Rules for Unmanned Aircraft Systems](#)

Final Ground Risk

3 fGRC

SAIL of design

SAIL II

Calculated SAIL of operation

SAIL II

Residual Air Risk Class

ARC-b

SAIL determination 7 results

Final GRC	rARC-a	rARC-b	rARC-c	rARC-d
≤2	I	II	IV	VI
3	II	II	IV	VI
4	III	III	IV	VI
5	IV	IV	IV	VI
6	V	V	V	VI
7	VI	VI	VI	VI
>7	Cert. Cat.	Cert. Cat.	Cert. Cat.	Cert. Cat.

If calculated SAIL is higher than expected or planned, return to the previous steps in order to lower the risk by reviewing the mitigations or the characteristics of the area of operation.

Once reviewed proceed to Step #8 by clicking **Next**.

11 Step #8 Containment requirement

This step is to address the risk of flyaway to avoid that the UA exits the operational volume and enters in the adjacent area where different risk may be present.

First indicate if there is any assembly of people in the adjacent area. In step #3 the system already gave you an indication of potential presence of outdoor assembly of people, see paragraph 4.3.

Impacted Land Use in adjacent area 8 results

Description	Assumed (ppl/km ²)	Overridden (ppl/km ²)	Override reason	People outdoor
Urban vegetation	4,000	---	---	No
Industrial or commercial units	6,500	---	---	Yes
Port areas	7,300	---	---	No
Construction sites	3,500	---	---	No
Green urban areas	10,000	---	---	Yes
Sport and leisure green	4,500	---	---	Yes
Sport and leisure built-up	8,200	---	---	Yes
Beaches, dunes and sand plains	49,900	---	---	Yes

Please assess these areas and other that may still contain outdoor assembly of people.

Step #8 Containment requirement

To determine the level of containment required, please indicate if there is any assembly of people.
For more information about SORA see [Easy Access Rules for Unmanned Aircraft Systems](#)

☒ Are there any assembly of people within 1km of the operational volume adjacent area?

Assembly of people size:

Sheltering for the UA in the adjacent area:

Based on the dimensions of the UA you are using, the system will present the applicable table Level of containment required.


Meaning that in case of failure, the UA crash will not affect area larger than 65 square meters.

Level of containment required for ≤ 650m² Critical area 6 results

Avg. pop. density allowed	No upper limit	< 50,000 ppl/km ²	< 5,000 ppl/km ²	< 500 ppl/km ²	< 50 ppl/km ²
Assembly of people	> 400K PEOPLE	> 40K AND <400K	< 40K PEOPLE	< 40K PEOPLE	< 40K PEOPLE
SAIL I & II	OUT OF SCOPE	OUT OF SCOPE	HIGH	MEDIUM	LOW
SAIL III	OUT OF SCOPE	OUT OF SCOPE	MEDIUM	LOW	LOW
SAIL IV	OUT OF SCOPE	MEDIUM	LOW	LOW	LOW
SAIL V	MEDIUM	LOW	LOW	LOW	LOW
SAIL VI	LOW	LOW	LOW	LOW	LOW

— Please refer to SORA 2.5 Annex E for the requirements related to the different level of containment.

If the selected UAS does not suit the containment level, the system will show following error:

 The selected drone is not designed to fly at the resulting level of containment

The selected drone is not designed to fly at the resulting level of containment

Containment level of robustness Medium

However, it may happen that your UAS was designed for operations in a higher SAIL (e.g. your operation is classified in SAIL II and the average population density of the adjacent area is $<500 \text{ ppl/km}^2$. This would result in a medium level of robustness. However, you are using a UAS that was designed for a SAIL III but has a low level of robustness. In this case you may decide to classify your operation in SAIL III (meaning that you will comply with the operational safety objectives (OSO) defined in the next step with the level of robustness defined for SAIL III).

Level of containment required for $\leq 650\text{m}^2$ Critical area 6 results

Avg. pop. density allowed	No upper limit	$< 50,000 \text{ ppl/km}^2$	$< 5,000 \text{ ppl/km}^2$	$< 500 \text{ ppl/km}^2$	$< 50 \text{ ppl/km}^2$
Assembly of people	> 400K PEOPLE	> 40K AND <400K	< 40K PEOPLE	< 40K PEOPLE	< 40K PEOPLE
SAIL I & II	OUT OF SCOPE	OUT OF SCOPE	HIGH	MEDIUM	LOW
SAIL III	OUT OF SCOPE	OUT OF SCOPE	MEDIUM	LOW	LOW
SAIL IV	OUT OF SCOPE	MEDIUM	LOW	LOW	LOW
SAIL V	MEDIUM	LOW	LOW	LOW	LOW
SAIL VI	LOW	LOW	LOW	LOW	LOW

In this case you can use the following option and select a higher SAIL:

You can operate at a higher SAIL to reduce the containment level

SAIL II

To proceed to the last Step #9 click [Next](#).

12 Step #9 Operation Safety Objectives (OSOs)

In this final step, the system will list the OSOs overview chart (operational, technical, training etc.) with the level of robustness that operator needs to apply to be able to conduct the planned operation safely.

OSO ID	Objective	Robustness	Operator dependency	Training Org. dependency	Designer dependency
OSO #01	Ensure that the UAS operator is competent and/or proven	LOW	X	-	-
OSO #02	UAS designed and produced by a competent and/or proven entity	NOT REQUIRED	-	-	X
OSO #03	Maintenance of UAS	LOW	Crit. 2, 3	-	Crit. 1
OSO #04	UAS components essential to safe operations are designed to an airworthiness design standard	NOT REQUIRED	-	-	X
OSO #05	UAS is designed considering system safety and reliability	NOT REQUIRED	-	-	X
OSO #06	C3 link characteristics are appropriate for the operation	LOW	X	-	X
OSO #07	Conformity check of the UAS configuration	LOW	Crit. 1, 2	-	Crit. 1
OSO #08	Operational procedures are defined, validated and adhered to	MEDIUM	X	-	Crit. 1

Scroll down through all lines to see all OSOs. Table also allows to screen expand

There is no input required in this step, other than declare that you will comply with the following:

Declaration of compliance

I hereby declare that the UAS operation will comply with:

- procedures to ensure that security requirements applicable to the area of operations are complied with in the intended operation;
- measures to protect against unlawful interference and unauthorised access;
- procedures to ensure that all operations are in respect of Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data. In particular it shall carry out a data protection impact assessment, when required by the National Authority for data protection in application of Article 35 of Regulation (EU) 2016/679;
- guidelines for the remote pilot(s) to plan UAS operations in a manner that minimises nuisances, including noise and other emissions-related nuisances, to people and animals.

and will keep record of:

- all the relevant qualifications and training courses completed by the remote pilot(s) and the other personnel in charge of duties essential to the UAS operation and by the maintenance staff, for at least 3 years after those persons have ceased employment with the organisation or have changed their position in the organisation;
- the maintenance activities conducted on the UAS for a minimum of 3 years;
- the information on UAS operations, including any unusual technical or operational occurrences and other data as required by the declaration or by the operational authorisation for a minimum of 3 years;
- an up-to-date list of the designated remote pilots for each flight;
- an up-to-date list of the maintenance staff employed by the operator to carry out maintenance activities.

☐ This I declare *

Once declared, click **Submit** to finalize step #9.



The IAM Hub is a Flagship Action of the Drone Strategy 2.0 and has received funding from a Contribution Agreement with the European Commission.

At that point, the Mitigation stage will be finished, and the progress chart will show it as completed. All risk inputs are done, SORA phase 1 is finalised. Tool will switch to Report stage.



13 Report stage

After entering the Report stage, the system will display an overview of all information provided during eSORA process. This is to provide an opportunity to review the information and verify no mistakes was made.

The information available in “read only”.

NA

Draft Operational Authorisation Application Form
 Assigned to Nurzhan ADIMOLDA • In SORA-589 • Urgency 10

Draft Operational Authorisation Application Form

Please find attached (Attachments panel in the Utilities pane to the right of your screen) the generated PDF

1. Operator details

Legal name	European Union Aviation Safety Agency
Operator registration ID	FIN87astrdge12k8

Contact person

Accountable Manager	John Doe
Phone	+49 11222333444
E-mail address	JohnDoe@Easa.eu

2. Details of the UAS operation

Expected start	24 Aug 2025, 00:00	Expected end	25 Aug 2025, 00:00
----------------	--------------------	--------------	--------------------

Operation description	---	More than one UAS simultaneously	No
Transporting dangerous goods	No	Dropping material	No

3. UAS model

Design organisation	EUROPEAN COMMISSION	Model	M350	Commercial name	TESTM350
---------------------	---------------------	-------	------	-----------------	----------

Type category	Multirotor	Maximum dimension (m)	2.7
Targeted operations category	Specific	Max. horizontal speed (m/s)	23
Propulsion system	Electric	Maximum take off weight (kg)	9
Containment level of robustness	Medium	Sound power level (dB-A)	---
Green flashing light	Yes	Max. Specific Assurance and Integrity	SAIL II
Conspicuity equipment	Direct remote identification	Type of C2 link	Direct radio link
M2 techn. mitigation robustness	Low		
Mitigation function	With parachute		

Step #1 Intended Operation characteristics

Operational volume	Minimum operational flight	20
--------------------	----------------------------	----

eSORA

SORA-589

Change stage

UAS model	Critical area (m ²)
M350	19.67
Int. Ground Risk	Final Ground Risk
7 iGRC	3 fGRC
Initial Air Risk Class	Residual Air Risk Class
ARC-a	ARC-b
TMPR robustness	Calculated SAIL
Low	SAIL II
Containment	SAIL of operation
Low	---
Work Status	PENDING-REPORT

If mistakes are spotted, click “Change stage”
 Case summary window and correct mistakes.
 To return, use **Change stage** → **Report** → **Submit**



Change stage

Stage name *

Select stage...

Comments

Cancel

Submit

After reviewing the information, upload any additional documents important for the case.



The IAM Hub is a Flagship Action of the Drone Strategy 2.0 and has received funding from a Contribution Agreement with the European Commission.

Additional documents

Drop or choose files

PDF

Appendix 2.pdf

PDF

Appendix.pdf

PDF

Contract.pdf

PDF

Operations Manual.pdf

Cancel

Save for later

Submit

In the lower part of the screen you can find all the information gathered, organised in the format of the application for an operational authorisation form as per AMC1 UAS.SPEC.030(2)

1. UAS Operator details

Legal name

European Union Aviation Safety Agency

Operator registration ID

FIN87astrdge12k8

Name of the accountable manager

Kai

Operational point of contact

First name

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Last name

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Email address

JohnDoe@Easa.eu

Phone

+49 11222333444

2. Details of the UAS operation

Expected start

30 Sept 2025, 00:00

Expected end

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Operation description

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Transporting dangerous goods

No

More than one UAS simultaneously

No

Dropping material

No

3. UAS model

UAS data

Design organisation

EUROPEAN COMMISSION

Model

Demonstration fixed wing

Commercial name

Demonstration fixed wing

Type category

Fixed wing

Targeted operations category

Specific

Propulsion system

Electric

Containment level of robustness

Medium

Green flashing light

Yes

Conspicuity equipment

Direct remote identification

M2 techn. mitigation robustness

High

Mitigation function

Without parachute

Maximum dimension (m)

4

Max. horizontal speed (m/s)

35

Maximum take off weight (kg)

45

Sound power level (dB-A)

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Max. Specific Assurance and Integrity

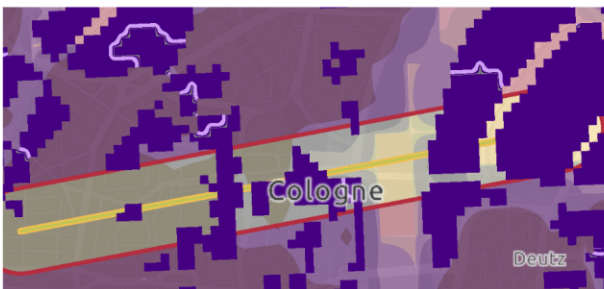
SAIL III

Type of C2 link

Direct radio link

Step #1 Intended Operation characteristics

Operational volume



Minimum operational flight altitude AGL (m)

2

Height of flight geography (m)

100

Contingency volume height (m)

166

Max. operational speed (m/s)

35

Ground Risk Buffer Computation

Ground risk buffer size defined using the 1:1 rule

Contingency volume width (m)

383.08

Ground risk buffer width (m)

2,655.39

Adjacent volume width (m)

5,000

To finalise click **Submit**

At this point, eSORA case will be completed. Work status switch to RESOLVED-COMPLETED and progress bar all stages checked.

Work Status

RESOLVED-COMPLETED

✓ Start

✓ Operation

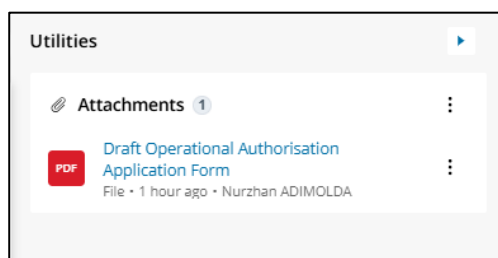
✓ Mitigation

✓ Report

On the Utilities-Attachment section, the system will generate a **Draft Operational Authorisation Application Form**, that contains all the details of SORA case in a format suitable for NAA review.

This draft, can be provided for NAA consideration.





The draft application for operational authorisation, along with the evidence documentations collected, may be sent now the NAA where you are registered. The NAA will check if your mitigations are properly justified and if they concur with your final SAIL.

After the NAA has given you their agreement you may start SORA phase 2 by complying with the mitigations and OSOs and developing all the additional evidence of compliance.

This phase is not included in the eSORA, it might be in the future.

When you have completed the SORA phase 2, you can send the final application for operational authorisation to the NAA.

If you have received the operational authorisation you can register the number on the eSORA (button). If the NAA asked you to revise your application compared to the eSORA case registered, please make sure you update it accordingly and upload a copy of the operational authorisation you received.